

REMARKS

This Amendment is submitted in response to the Office Action dated April 3, 2006. In the Office Action, the Patent Office rejected Claims 1, 2, 6-9, 22 and 31 under 35 U.S.C. §102(b) as being anticipated by *Hayse* (U.S. Patent No. 2,905,254). Further, the Patent Office rejected Claims 28 and 35-37 under 35 U.S.C. §102(b) as being anticipated by *Kinzenbaw et al.* (U.S. Patent No. 5,346,019). Applicant notes with appreciation that the Patent Office allowed Claims 10-21, 23-27, 29, 30 and 32-34.

By the present Amendment, Applicant amended Claims 1, 22, 24, 30 and 31 and added Claims 38-40. Applicant submits that the application is in condition for allowance in view of the amendments and for the reasons that follow. Notice to that effect is requested.

Furthermore, Applicant notes with appreciation that the Patent Office indicated that Claims 3-5 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicant cancelled independent Claim 35 and dependent Claims 36 and 37; added Claim 38 incorporating the limitations of Claim 3 into Claim 1; and added dependent Claims 39 and 40. Applicant, therefore, submits that Claims 38-40 are in allowable form. Notice to that effect is requested.

With respect to the rejection of Claims 1, 2, 6-9, 22 and 31

under 35 U.S.C. §102(b) as being anticipated by *Hayse*, Applicant respectfully submits that the rejection has been overcome by the amendment to Claims 1, 22 and 31 and for the reasons that follow.

In the Office Action, the Patent Office alleges:

"*Hayse* discloses an apparatus comprising a frame 9, an axle 17, a cylinder 76, discs 52, a controller (not shown but considered the controller that controls cylinder 76), wherein the frame pivots with respect to the axle. The Examiner notes that the apparatus frame is pivotally connected (94) to the draw bar of the tractor. This type of connection allows the apparatus frame to pivot relative to the tractor that it is connected to. Therefore, if the tractor drives over an undulation, obstacle or depression, this would cause the frame to pivot relative to the tractor with the frame in turn pivoting about axle 17. For example, if the tractor drives over an undulation, when the rear of the tractor moves upwardly, the front of the frame would also move upwardly, and the frame would pivot about axle 17 with the rear of the trailer moving downwardly. The opposite would obviously be true if the tractor and frame were to travel over a depression. *Hayse* is therefore considered to meet the claimed limitation of the movement of the first end of the frame in a first direction resulting in movement of the second end of the frame in an opposite direction.

Claim 1, as amended, requires that a portion of the cylinder is located between the frame and the axle. Further, Claim 1 requires that the controller controls movement of the frame. Still further, Claim 1 requires that the cylinder extends between the axle and the frame to move the frame away from the axle.

Claim 22, as amended, requires that the cylinder lifts the frame. Further, Claim 22 requires the piston to move toward the discs to lift the frame. Still further, Claim 22 requires a hitch having a length defined between an end and a connector wherein the

end of the hitch is attachable to the frame and wherein the connector rotates 360 degrees.

Claim 31, as amended, requires that the cylinder extend between the axle and the frame. Further, Claim 31 requires the cylinder to move the frame away from the axle. Still further, a hitch having a length defined between an end and a connector wherein the end of the hitch is attachable to the frame wherein the connector rotates 360 degrees.

Hayse merely discloses a wheel mounted tandem disk harrow having a cylinder mounted to a wheel axis. Spindles 68 and 69 carry ground wheels 70 and 71 to support the frame "with gangs at fixed elevations which determine the depths at which the disks operate in the soil."

Nowhere does *Hayse* disclose that a portion of the cylinder is located between the frame and the axle as required by Claim 1. Further, nowhere does *Hayse* disclose that the controller controls movement of the frame as required by Claim 1. *Hayse* merely discloses that the cylinder moves the wheels 70 and 71. Specifically, *Hayse* discloses that "the wheels may be raised or lowered to support the disk gangs for the desired depth of the cut." Accordingly, *Hayse* merely teaches a cylinder which moves a wheel axle. Therefore, nowhere does *Hayse* disclose that the cylinder moves the frame at an angle with respect to the axle as required by Claim 1.

Still further, nowhere does *Hayse* disclose that the cylinder extends between the axle and the frame to move the frame away from the axle as required by Claim 1. *Hayse* merely discloses a cylinder positioned above the frame and the axle. The cylinder moves the wheels in contact with the ground to move the axle. Specifically, the wheels contact the soil to move a first end and a second end of the frame in the same direction with respect to the soil, for example, upward with respect to the soil. Therefore, nowhere does *Hayse* disclose that the cylinder extends between the axle and the frame to move the frame away from the axle as required by Claim 1.

Moreover, nowhere does *Hayse* disclose that the cylinder lifts the frame as required by Claim 22. Further, nowhere does *Hayse* disclose that the piston moves toward the discs to lift the frame as required by Claim 22. *Hayse* merely discloses that "it is recommended that weight first be added to the frame, in accordance with well-known practice and the depth of the ground wheels 70 and 71 be adjusted to maintain the desired depth of cut." *Hayse* merely discloses a piston which moves away from discs to move wheels onto the soil. Therefore, nowhere does *Hayse* disclose the present invention as defined by Claim 22.

Furthermore, nowhere does *Hayse* disclose that the connector rotates 360 degrees as required by Claim 22. *Hayse* merely discloses that "the frame has a tongue 81 located in substantial alignment with the center member 8 of the frame with the rear

thereof pivotally connected by means of a pin 82." Therefore, nowhere does *Hayse* disclose that the connector rotates 360 degrees as required by Claim 22.

In addition, nowhere does *Hayse* disclose that the cylinder extends between the axle and the frame. Further, nowhere does *Hayse* disclose that the cylinder moves the frame away from the axle as required by Claim 31. *Hayse* merely teaches a cylinder moving wheels in a perpendicular direction with respect to the frame. In addition, the cylinder is located above the frame and the wheel axis. Therefore, nowhere does *Hayse* disclose the present invention as defined by Claim 31.

Under 35 U.S.C. §102(b), anticipation requires that a single reference discloses each and every element of Applicant's claimed invention. *Akzo N.V. v. U.S. International Trade Commission*, 808 F.2d 1471, 1479, 1 USPQ 2d 1241, 1245 (Fed. Cir. 1986). Moreover, anticipation is not shown even if the differences between the claims and the reference are "insubstantial" and one skilled in the art could supply the missing elements. *Structure Rubber Products Co. v. Park Rubber Co.*, 749 F.2d. 707, 716, 223 USPQ 1264, 1270 (Fed. Cir. 1984).

Since *Hayse* fails to disclose the elements of the present invention specifically defined in independent Claims 1, 22 and 31, Applicant asserts that the rejection of Claims 1, 2, 6-9, 22 and 31 under 35 U.S.C. §102(b) has been overcome and should be withdrawn.

Notice to that effect is requested.

With respect to the rejection of Claims 28 and 35-37 under 35 U.S.C. §102(b) as being anticipated by *Kinzenbaw et al.*, Applicant submits that the amendment to Claim 28 and the cancellation of Claims 35-37 overcome the rejection of the Patent Office. In the Office Action, the Patent Office alleges that:

"*Kinzenbaw et al.*, disclose an apparatus for separating soil including a frame, a plurality of discs, a pillar 118 a column 100b inside the pillar, liner 180b and plates 182b inside the pillar supporting the column as shown in Figures 3d & 6. The Examiner notes that front cylinder 80 moves to adjust the angle of the frame relative to the soil as viewed from above (see Figure 2 where the frame is pivoted 90 degrees). Additionally, it is noted that the frame 20 has a body defined by a plane as shown in Figure 3d. Furthermore, Figure 1 shows discs positioned on opposite sides of the tires as does Figure 2 in phantom."

Claim 28 requires that the front cylinder moves the first end of the frame in a first direction vertically with respect to the axis. Further, Claim 28 requires that the cylinder moves the second end of the frame in a second direction vertically with respect to the axis wherein the first direction is opposite to the second direction.

Kinzenbaw et al. merely disclose a row crop planter 10 having a plurality of rear, pulled-type row units 28 secured to a main carrier frame 12. *Kinzenbaw et al.* merely disclose that the main carrier frame 12 is secured to a lift frame 20 which may be lifted.

Nowhere does *Kinzenbaw et al.* disclose that the front cylinder moves the first end of the frame in a first direction vertically with respect to the axis and the second end of the frame in a

second direction vertically with respect to the axis wherein the first direction is opposite to the second direction. As alleged by the Patent Office in the Office Action, *Kinzenbaw et al.* merely disclose a cylinder which moves a frame horizontally at an angle relative to the soil when viewed from above. Therefore, Nowhere does *Kinzenbaw et al.* disclose a front cylinder positioned on the frame wherein the front cylinder moves the frame and discs vertically with respect to the soil as required by Claim 28.

Moreover, nowhere does *Kinzenbaw et al.* disclose tires attached to the frame wherein the discs are positioned on opposite sides of the tires as required by Claim 28. *Kinzenbaw et al.* disclose tires attached to a frame which does not move upward or downward. The tires are, in fact, attached to a different frame which is not moved vertically with respect to the soil. Moreover, *Kinzenbaw et al.* merely discloses "rear, pulled type row units 30" secure to the rear of the tires. Therefore, nowhere does *Kinzenbaw et al.* disclose tires attached to the frame wherein the discs are positioned on opposite sides of the tires as required by Claim 28.

Under 35 U.S.C. §102(b), anticipation requires that a single reference discloses each and every element of Applicant's claimed invention. *Akzo N.V. v. U.S. International Trade Commission*, 808 F.2d 1471, 1479, 1 USPQ 2d 1241, 1245 (Fed. Cir. 1986). Moreover, anticipation is not shown even if the differences between the claims and the reference are "insubstantial" and one skilled in the art could supply the missing elements. *Structure Rubber Products*

Co. v. Park Rubber Co., 749 F.2d. 707, 716, 223 USPQ 1264, 1270 (Fed. Cir. 1984).

Since *Kinzenbaw et al.* fail to disclose each and every element of independent Claim 28, the rejection of Claim 28 under 35 U.S.C. §102(b) is improper and should be withdrawn. Notice to that effect is requested.

In view of the foregoing remarks and amendments, Applicant respectfully submits the rejections of Claims 22 and 31 under 35 U.S.C. §103(a) have been overcome and should be withdrawn. Notice to that effect is requested.

Claims 2-9 depend from Claim 1. These claims are further believed allowable over the references of record for the same reasons set forth with respect to independent Claim 1 since each sets forth additional structural elements of Applicant's invention.

In view of the foregoing remarks and the amendments, Applicant respectfully submits that Claim 1, 2, 6-9, 22, 28 and 31 of the application are in allowable form and that the application is now in condition for allowance. If any outstanding issues remain, Applicant urges the Patent Office to telephone Applicant's attorney so that the same may be resolved and the application expedited to issue.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this **Amendment** is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 1, 2006.


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